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THE UNIVERSITY OF ALBERTA

CHILDREN OF ALCOHOLICS: PERSONALITY PROFILE

by

ALAN J. KOSTYNIUK

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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OF MASTER OF EDUCATION

IN

COUNSELLING PSYCHOLOGY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA

SPRING, 1988

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Peter Calder
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DATE December 28, 1987

DEDICATION

For children of suffering everywhere

ABSTRACT

The present investigation was conducted with the legal parents of male and female children between the ages of six and sixteen. All sixty-two respondents were selected on the basis of their active involvement in a local Alberta Alcohol and Drug Abuse Commission (AADAC) treatment unit. Administration of the Personality Inventory for Children (P.I.C.) was carried out during February, March, and April of 1987, yielding parental perceptions of selected behaviors of the aforementioned children.

A comparison between the research group described above and the test authors' norm group indicated several significant group differences as evidenced on P.I.C. profiles. Also, extreme or "problematic" scores were not found to occur across all measures but rather predominantly on a few scales such as "Depression" and "Family Relations". An important finding was that intellectual differences between the two groups were not apparent in this study suggesting that intellectual abilities may not be seriously affected by the experience of growing up in an alcoholic household.

Correlations between the subscales of "Adjustment" and "Depression", "Withdrawal" and "Depression", and "Social Skills" and "Depression" showed the strongest relationships with one another throughout this study.

Still, "Depression" figured as a central factor throughout, reflecting an influence acknowleged in the majority of children of alcoholics' syndromes.

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CHAPTER I

INTRODUCTION

The adverse effects of alcohol abuse on humankind has long been a topic of both informal discussion and intellectual debate. Historically, scientific investigation has been concerned with the destructive outcomes (e.g., cirrhosis of the liver, Korsakoff's syndrome) experienced first-hand by problem drinkers. In recent years, however, alcoholism has been recognized as a problem that affects not only the alcoholic but those within his or her immediate environment, especially family. Consequently, greater research emphasis has been placed on the negative impact sustained by non-problem drinkers who live within the family system of alcoholics (Hecht, 1973, 1977; Gravitz and Bowden, 1984). Foremost in this regard has been the work conducted on offspring of alcoholics who are commonly referred to as children of alcoholics (C.O.A.'s).

Many C.O.A. researchers have added to a growing body of evidence corroborating the detrimental effects of growing up in a family where at least one member is alcoholic or at risk of becoming alcoholic (Black 1979, 1981a; Woititz, 1983). It is claimed that the resultant effects of such an experience include: low self-esteem, guilt and self-blame, psychosomatic ailments (e.g.,

headaches and insomnia), and, perhaps most importantly, an increased risk of alcoholism in later adult life (El-Guebaly and Offord, 1979; Cotton, 1979; Goodwin, 1979; Stark, 1987). Others argue that the influence of alcoholic parents on the psychopathology of their children is poorly documented and inconclusive (Adler and Raphael, 1983).

Despite a plethora of research efforts, many voids and frequently conflicting views continue to persist in the scientific literature related to children of alcoholics. For example, evaluations of C.O.A.'s who have survived their upbringing by alcoholic parents and matured relatively unscathed psychologically are rare. The "at-risk" status of these children in comparison with other types of serious psychiatric illness (e.g., schizophrenia and affective disorders) remains to be studied. Furthermore, few researchers have addressed the question of parent-child relationships within alcoholic households. It is also apparent, following a search of the literature, that no available published studies examine parental views on the effects of alcohol abuse on children from alcoholic homes.

The Problem Under Investigation

The majority of C.O.A. studies to date represent attempts to delineate specific childhood problems attributable to having an alcoholic as a parent (Stark, 1987). Despite claims of "new findings", the disparity and

contradictions among such reports leads some (e.g., El-Guebaly and Offord, 1977; Adler and Raphael, 1983; Russell, Henderson, and Blume, 1985) to a critical acceptance, at best, of any (reportedly) "new" information.

The present study was conducted on current clients of Alberta Alcohol and Drug Abuse Commission (AADAC) treatment units located in Edmonton Alberta. The study was borne from concerns for the lack of documentation about parental perceptions of the behaviors of children from alcoholic households. Of special interest to this researcher was the absence of data conveying parental perceptions about one's own children in these circumstances, especially recognition and understanding of the impact of alcoholism on family members. This interest has been transposed into an investigation intended to help objectify reports of the (allegedly) damaging influence(s) of alcoholism on children.

As a means toward interpreting and assessing the behaviors of these children, a personality test -the Personality Inventory for Children (P.I.C.)(Wirt, Lachar, Klinedinst, and Seat, 1977, revised 1984)- was selected for use with this population. Graham and Lilly (1984) have indicated that this instrument provides "objective measurement" of personality characteristics as well as cognitive and academically related abilities. They have further stated that the P.I.C. is as sophisticated and psychometrically sound an instrument as is available

(Graham and Lilly, 1984). It is hoped that this more objective means of assessing the problems of children of alcoholics through the perceptions of their parents will help aid, in a systematic way, the further elucidation of "factual" information regarding C.O.A.'s.

The P.I.C.'s psychometric properties have been extensively investigated and documented for many years. To be specific, the P.I.C. boasts an average test-retest reliability coefficient of .86; internal consistency mean alpha of .74, and inter-rater reliability coefficients which frequently exceed .65 (Wirt, Lachar, Klinedinst, and Seat, 1984). It is on the basis of these evident strengths -as an empirical measure- that the P.I.C. has been chosen for utilization in this study.

Purpose of the Study

The purpose of this study, broadly stated, is to determine whether a sample of "children of alcoholics" differs statistically from "normal" children on personality variables measured by the Personality Inventory for Children. The means for assessing any such differences will be an examination of the ratings of these children's behaviors provided by their alcoholic parents. Thus, the data collected for this study consists primarily of parental perceptions as reported through their responses to questions on the P.I.C..

Succinctly, this research shall endeavor to address the following questions:

1. Are the P.I.C. profiles attained from a children of alcoholics research sample significantly different from a sample of statistically "normal" children?

2. On what scales of the P.I.C. profile are differences between these two groups apparent?

3. What proportion of the profiles of children of alcoholics reflect the need for clinical attention?

4. What is the relationship among different clinical scale scores of children of alcoholics?

Limitations of the Study

The population studied was comprised of children of alcoholics who were voluntarily undergoing alcoholism treatment at the time of their research participation. Consequently, the generalizability of findings herein to other groups of C.O.A.'s (e.g., those whose parents are not involved in addictions counselling) may be restricted.

Another possible limitation of this study is that the descriptions of the C.O.A.'s presented are based on their parents' reports on the P.I.C.. While these reports have been found to have acceptable validity with a variety of

other clinical populations, this test has never been validated with alcoholic populations.

The P.I.C. is designed predominantly as a screening instrument. Elevated scores merely indicate the possibility of problems. As with any psychological test there is no assurance that these problems, in all cases, actually exist.

Finally, only the eldest child between ages six and sixteen (in any given household) was profiled for this study. The possibility exists that results associated with this group are not illustrative of all C.O.A.'s.

Definitions

For the purposes of this study the following operational definitions will be used:

i) Personality Inventory for Children (P.I.C.): a 600 item 'True'/'False' personality inventory answered by a secondary respondent, typically a parent.

ii) AADAC: Alberta Alcohol and Drug Abuse Commission, a province of Alberta government agency, with the primary mandate of prevention, treatment, and education relating to substance abuse, offering free services to the general public.

iii) Problem-drinker: an individual who, regardless of the quantity or frequency of his/her alcohol consumption, experiences problems in various aspects of life as a consequence of usage. Within this study, frequently someone who has caused similar difficulties in the lives of those around him/her; often a self-designated assessment.

CHAPTER II

REVIEW OF THE RELATED LITERATURE

The following review presents the C.O.A. research literature with regard to: (a) prevalence estimates for children of alcoholics, (b) genetic factors in alcoholism, (c) familial transmission of psychiatric and physical disorders associated with alcoholism, and (d) prevention and treatment for children of alcoholics. In addition, an examination of reliability and validity issues pertaining to the P.I.C. is included.

As is the case with much social research, the studies reviewed below offer contradictory and inconclusive results. This is due, in part, to the lack of clear, standardized terminology. Terms like "alcoholism", "alcohol abuse", and "problem drinking" have been defined and used inconsistently by clinicians, researchers and policy makers. Additional complicating factors include inadequate research designs (e.g., lack of comparison groups, unspecified or unreliable data collection techniques), limited generalizability due to restricted sample sizes, and difficulty in separating the effects of alcoholism on the family from confounding variables such as socio-economic class and family disorganization (El-Guebaly and Offord, 1977).

Evidently, the C.O.A. research literature and the scientific community are not set in a unified theoretical direction (Lord, 1985). What does seem consistent throughout most studies, regardless of 'type', is the recurrent need for more stringently applied research practices and greater emphasis upon objective and quantitative methods (Russell, Henderson, and Blume, 1985).

These and other methodological shortcomings have been considered at length in most of the reviews of the literature (Adler and Raphael, 1983; Cotton, 1979; El-Guebaly and Offord, 1977; Goodwin, 1978; Wilson and Orford, 1978; Watters and Theimer, 1978; Woititz, 1978; Russell, Henderson, and Blume, 1985) and a synopsis of the review of the literature (Walmsley, 1980). Therefore, given that a critique of methodologies is not the present focus, such concerns shall only warrant laconic comment hereinafter.

Prevalence Estimates For Children of Alcoholics

Calculating an estimate of the number of children of alcoholics is complicated by the fact that it relies heavily upon self-reporting and assumes that alcoholic persons are randomly dispersed throughout the population (Russell, Henderson, and Blume, 1985). Nevertheless, using the 1979 (American) National Drinking Practices Survey, the 1980 U.S. Census, and a process of extrapolation suggested by Booz-Allen and Hamilton (1975), the Children of

Alcoholics Foundation (1985) estimated 28,600,000 Americans (i.e., one out of eight Americans) to be the child of a problem drinker. It must be realized that results from the survey identifying problem drinking reflect respondent perceptions in interviews without validation by other, more independent, measures. Thus, identification of 'problem drinkers' was probably different from what would have been attained through alternate methods such as a survey of clinical services clientele (Children of Alcoholics Foundation, 1985).

Other studies also indicated striking findings. In a review of the literature, Cotton (1979) concluded that every study of alcoholic families indicated that alcoholics are more likely than nonalcoholics to have an alcoholic parent or relative. Parental alcoholism is six times greater for alcoholic patients than for nonalcoholic patients and two times greater for alcoholic patients than for psychiatric patients. Goodwin (1979) supported this view, reporting that the "...strongest predictor of alcoholism is family history of alcoholism" (cited in Adler and Raphael, 1983). More specifically, various studies cited a range from 27.4% to 52% of adult alcoholics who had one or more parents who were alcoholics, with variations resulting from the sex of both the alcoholic parent and child (Bosma, 1972; McKenna and Pickens, 1981; Miller and Jang, 1977). Sons of alcoholics are reportedly at greater risk than daughters (Walmsley, 1980).

While the above statistics generally reflect the incidence of alcoholism within the United States population, proportions of problem drinkers estimated for Canadians suggest a similar situation exists in this country (McKim, 1986). With so many people potentially affected by problem drinking, the importance of studying the effects of parental alcoholism on children is apparent.

Genetic Factors in Alcoholism

With respect to many dedicated research efforts, it is now 'common knowledge' that alcoholism tends to run in families. In 1979, Cotton published an extensive review of findings on the familial incidence of alcoholism. She found that regardless of the nature of the population of nonalcoholics studied, an alcoholic was more likely than a nonalcoholic to have a father, mother, or more distant relative who was an alcoholic. Moreover, a greater frequency of reported alcoholism was found in men than in women, indicating that fathers and brothers were more likely than mothers and sisters to be alcoholic. Despite the importance of her work, Cotton's research does not permit the identification of precise environmental and/or hereditary factors which mediate between predisposing features of the "disease" and a family history of alcoholism.

In another review of the literature, El-Guebaly and Offord (1977) reported that studies of relatives, twin

studies, a half-sibling design, and an adoptees design "...support the existence of a genetic factor in the etiology of some forms of alcoholism" (p.362). There have been attempts to correlate alcoholism with color blindness but results have been inconclusive (Cruz-Coke and Varela, 1966; Kaij and Dock, 1975), as have results involving other genetic factors [e.g., blood groups and their antigens (Goodwin, 1978) and decreased levels of zinc in both alcoholics and their non-drinking children (Kern, Hassett, and Collipp, 1981)]. At present, the question remains whether genetic markers can be found to serve as a screening mechanism for 'high-risk' individuals.

In an early study of children of alcoholics, Roe (1945) concluded that there was no correlation between parental alcoholism and pathology in children of alcoholics placed in a foster setting before the age of ten. Nylander (1960) also reported no differences in physical or pathological development between alcoholics and their non-alcoholic children as long as there was no physical or mental damage to the fetus. Although initiallly impressive, results of both these studies should be regarded cautiously due to methodological weaknesses which include the absence of controls in comparison group designs and the need for greater attention to sampling biases. This type of allowance could facilitate greater and more valid inferences regarding the variables of interest (Adler and Raphael, 1983; El-Guebaly and Offord, 1977).

In support of environmental influences, El-Guebaly and Offord (1977) cited five studies that indicated alcoholics had higher percentages of parental disharmony, parental loss, antisocial behavior, psychiatric illness and broken homes than non-alcoholics.

More recently Cloninger, Bohman, and Sigvardsson (1981) indicated two possible alcohol abuse patterns; "...one predominantly genetically based and a more common form that is more influenced by the environment" (cited in Adler and Raphael, 1983).

In summary, it is evident that the nature-nurture debate regarding the etiology of alcoholism and C.O.A. alcoholism-related syndromes remains unsettled. Despite this, several effects of alcoholism and the manifest characteristics of children of alcoholics have been documented.

Familial Transmission of Psychiatric and Physical Disorders Associated With Alcoholism

As demonstrated above, reported effects of parental alcoholism on children vary. In 1973, the term "fetal alcohol syndrome" (FAS) was introduced in reference to a combination of physical and mental birth defects often apparent in the offspring of alcoholic mothers. FAS reportedly includes a number of unique and recognizable facial and bodily anomalies, which are often accompanied by a physical growth deficiency, a long-term delay in physical

and psychological development and a significantly lower I.Q. and higher mortality rate than those of other children (Jones and Smith, 1975; Oullette and Rosett, 1976).

The Children of Alcoholics Foundation (1985) indicated that 40 to 45 per cent of severely alcoholic women produced offspring with FAS. However, designs of these studies were often substandard (El-Guebaly and Offord, 1977; Children of Alcoholics Foundation, 1985). For example, gross categories of "light", "moderate" and "heavy" drinking have been used in making correlations. Consequently, the precise nature of the relationship between FAS and maternal alcoholism remains unspecified.

Another possible genetically transmitted disorder related to alcoholism is hyperactivity (Morrison and Stewart, 1971, 1973). Higher incidence of hyperactivity has been reported for both alcoholics and their children in comparison to control groups (El-Guebaly and Offord, 1977). However, the link between hyperactivity and alcoholism remains tentative since it is difficult to separate this specific behavior from antisocial behaviors in general (Walmsley, 1980).

Research revolving around children and adolescents with alcoholic parents has indicated an increased likelihood of legal problems (Chafetz, Blane, and Hill, 1971), emotional problems (including anxiety, neurosis, depression, increased aggressiveness and anti-social behavior) (Nylander, 1960; Herjanic, Herjanic, Penick,

Tomelleri, and Armbruster, 1977; Chafetz, Blane, and Hill, 1971), and school-related problems (Nylander, 1960; Herjanic, Herjanic, Penick, Tomelleri, and Armbruster, 1977; McLachlan, Walderman, and Thomas, 1973). Recovery of an alcoholic parent does not necessarily mean the alleviation of dysfunction among children. For example, while reported family harmony is more likely to improve with parental recovery from alcoholism, significantly lower-self esteem is identified in these children as compared to controls (McLachlan, Walderman, and Thomas, 1973).

Difficulties associated with being the offspring of an alcoholic do not seem to end in adolescence, but often carry over into adulthood (Stark, 1987). Most studies of adult children of alcoholics aim at categorizing the etiology of alcoholism amongst these offspring as either "genetic" or "environmental" (El-Guebaly and Offord, 1977; Walmsley, 1980). Others are retrospective in nature, indicating a greater likelihood for alcoholism in adult life.

In a twenty year longitudinal study (one of the few studies utilizing this design), adult children of alcoholics were shown to have increased concern about mental health problems, to commit suicide more often, and to have more severe marital difficulties than children of non-alcoholic parents (Miller and Jang, 1977). However, the generalizability of these results is probably limited due

to the restriction of the sample to offspring of multi-problem families.

Goodwin, Schulsinger, Hermansen, Guze, and Winokur (1973) reported that alcoholic offspring have divorce rates -not related to drinking problems- that are three times higher than offspring of non-alcoholics, suggesting the possibility of poorly developed interpersonal relations. Adult female offspring of alcoholics are also at higher risk of becoming alcoholic, marrying an alcoholic, and developing an affective disorder (Adler and Raphael, 1983).

Observational or Descriptive Research

While a variety of practitioners have offered characterizations of adult children of alcoholics, perhaps the two most quoted are Janet Woititz (1983) and Claudia Black (1981a). The family atmosphere of children of alcoholics has been described as chaotic, with little frame of reference regarding acceptable emotions and behaviors. Based on clinical observations with an unreported number of adult children of alcoholics, Woititz (1983) comprised the following "generalizations" allegedly common to this population:

1. Adult children of alcoholics guess at what 'normal' is.
2. ....have difficulty in following a project through from beginning to end.
3. ....lie when it would be just as easy to tell the truth.
4. ....judge themselves without mercy.
5. ....have difficulty with intimate relationships.

6. ....over-react to changes over which they have no control.
7. ....constantly seek approval and affirmation.
8. ....feel that they are different from other people.
9. ....are either super responsible or super irresponsible.
10. ....are extremely loyal, even in the face of evidence that the loyalty is undeserved.
11. ....are impulsive (pp.2-10).

Given that Woititz's results are based on participant/observer methodology which includes the informal selection of respondents and observations as well as dependence upon the subjective interpretations of observed events, her inferences would be difficult to systematically replicate and should be regarded as tentative and exploratory in nature (Li, 1981).

Black (1979) portrayed the child of an alcoholic as one who first learns not to express feelings, then eventually learns not to feel, with resulting isolation and loneliness in later years. Children adjust to their alcoholic families by taking on the role of the 'Responsible One' (who feels reponsibility for the whole family and attempts to provide the necessary structure), the 'Adjuster' (who becomes extremely flexible in adapting to presenting situations), and the 'Placater' (who tries to smooth things over and help others feel comfortable in order to restore a peaceful world). While these "survival" mechanisms may be adaptive roles during childhood years, according to Black this limited range of behavior outlives its usefulness when it extends into adulthood. For instance, 'Placaters', in constantly trying to appease

others, may lack a sense of self and be unaware of their own needs.

While the focuses of Woititz (1983) and Black (1981a) are slightly different, the implications are similar. That is, children of alcoholics develop patterns in their childhood which may limit their flexibility and range of functioning in adulthood.

Prevention and Treatment

Prevention

The reported effects of alcoholism on offspring indicate the need for both preventive strategies and treatent interventions. However, little research has been done in this area. It is logical to suggest, though, that treatment for the alcoholic parent(s) alone may not be enough.

Primary prevention programs need to focus on preventing fetal alcohol syndrome and other fetal alcohol effects, child abuse or neglect in alcoholic families, hyperactivity or its later associated behavioral disorders, various mental health problems, drug abuse, and alcohol problems (Children of Alcoholics Foundation, 1985). As role behaviors learned in the alcoholic home are often inappropriatedly used in other relationships (Hecht, 1973), family therapy or programs for all ages of children of alcoholics may be indicated whether the alcoholic is in

treatment or is recovered (Black, 1979; Bosma, 1972; Kern, Tippman, Fortgang, and Paul, 1977-78; Children of Alcoholics Foundation, 1985).

In order to make prevention and treatment services available to children of alcoholic parents, two screening instruments have recently been developed in questionnaire form. Most noteworthy of the two is the Children of Alcoholics Screening Test (CAST)(see Appendix B). This questionnaire was designed for the general assessment of children and to evaluate their appropriateness for treatment.

Treatment

The existing realm of treatment programs includes therapy for alcoholic parents alone, programs for young children (rare at present), treatment for adolescent and adult children of alcoholics (including self-help groups), and family therapies.

Perhaps the best known treatment-related organizations for families and friends of alcoholics are Al-Anon and Alateen. These groups are outgrowths of Alcoholics Anonymous (AA) and are designed as support groups for people with an alcoholic relative or friend. Similar to AA, these programs are based upon "The Twelve Steps" and the "Twelve Traditions". The steps have a strong spiritual component requiring admission of one's powerlessness over alcohol and surrender to a higher power. In support of the

effectiveness of Alateen, Hughes (1977) reported that adolescent children of alcoholics who attended Alateen were better adjusted emotionally than those adolescent offspring of alcoholics who did not attend Alateen. Specifically, non-Alateen individuals had significantly higher scores on the 'Profile of Mood States', lower self-esteem, greater number of legal problems, and more school-related problems.

As much as it is therapeutic for certain individuals, the spiritual nature of AA may also prevent others from joining its membership. On the basis of their work with 1,500 adult children of alcoholics, Gravitz and Bowden (1984) proposed an alternative treatment spectrum which recognizes, but does not emphasize, spiritual development. However, no reported research has indicated the effectiveness of this method. Their treatment and recovery stages are outlined below:

1. Survival - In this stage, children learn mechanisms to cope with their environment. These are similar to the survival roles identified by Black (1981a).

2. Emergent Awareness - This stage involves recognition of being the child of an alcoholic and acceptance that legitimate reasons for difficulties exist.

3. Core Issues - Control of the self and environment dominates life areas in this stage of the recovery process. An "all-or-none" pattern is prominent, creating difficulty in breaking problems down into managable components.

4. Transformations - The strategy of "chunking things down" (breaking major goals into smaller, more easily attainable parts) is now learned. This becomes an aid to effective functioning in life situations such as the development of new relationships.

5. Integration - Self-acceptance, self-esteem, and self-trust increase as mind, body and actions develop a synthesized unity, bringing about increased meaning in life.

6. Genesis - This is a spiritual process transcending religion; perceived separation from others and the world dissolves. Similar to the foundations of AA, this is a recognition of a "process greater than oneself." Genesis is predominately a speculative stage which only a few will attain.

While recovery may follow the steps suggested by Gravitz and Bowden (1984, 1985) it is important to realize that many children of alcoholics will not move past the survival stage unless "...some event occurs which propels

them forward" (e.g., exposure to literature or a group on children of alcoholics which results in a cathartic effect). Thus, it is crucial to consider ways in which treatment strategies can be introduced to children of alcoholics, preferably before adulthood, in order to minimize the detrimental effects of growing up in an alcoholic (household) environment.

Education in the school is one alternate strategy. Another possibility is to introduce treatment for children of alcoholics as part of the recovery program for the alcoholic parent. Children of alcoholics can thus be easily identified and immediate follow-up programs can be implemented.

The question then arises, is treatment necessary for the child of a 'recovered' alcoholic? Results of the literature to date are contradictory. Several authors have suggested that children of recovered alcoholics still need treatment (e.g., McLaughlin, Walderman, and Thomas, 1973; Black, 1981b).

Only one study was found which followed the effects of children of recovered and relapsed alcoholics during and after a residential treatment program (Moos and Billings, 1982). The subjects were 59 patients with adolescent or younger children and their spouses. The subjects were divided into two groups (recovered: n = 28; relapsed: n = 23) depending upon post-treatment behaviors. A sociodemographically matched control group was used.

Patients and their spouses completed follow-up questionnaires six to eight months after treatment and again 18 months later. Three sets of variables were measured: parental functioning, family resources and stresses, and children's functioning. The latter variable was assessed using a 'yes'/'no' questionnaire completed by the mother. There were five items regarding emotional problems: (e.g., tantrums) and five items concerning common physical problems: (e.g., asthma). Mothers were also asked to identify regular use of prescribed or other drugs (including alcohol and tobacco) among their children and to disclose serious physical or mental disorders.

Results indicated that symptoms of emotional disturbance were more evident in children of relapsed alcoholic parents than children of recovered parents. In fact, the latter group were functioning as well as the control children.

Several difficulties are apparent in Moos and Billings' (1982) study. Mothers may have held inaccurate perceptions of their children, particularly regarding their drug usage. Wives of recovered alcoholics may have felt a greater need to report positive results regarding their families than wives of relapsed alcoholics. It is plausible that more valid information regarding the children's functioning would have been attained by approaching the children directly. As well, the scope of the instrument used to measure functioning was narrow. Important areas for

study [e.g., 'trust' and 'ability to engage in intimate relations' (Woititz, 1983; Black, 1981a)] were not tapped. Furthermore, "yes/no" answers entailed a forced choice which limited the amount and type of information received.

Personality Inventory for Children

Reliability Studies

Wirt, Lachar, Klinedinst and Seat (1984) have documented the reliability of the P.I.C. within clinical and normal populations. Test-retest reliability was estimated in a clinical population by having mothers of 34 children being evaluated at Detroit's Lafayette Clinic outpatient services complete the P.I.C. on two separate occasions. The time interval between the test administrations was between 4 and 72 days ($X = 15.2$). The clinical sample included 22 males and 12 females ranging in age from 5.2 to 14.7 years ($X = 9.7$). The correlations between the two administrations yielded an average reliability coefficient of .86 for the 16 profile scales and an average of .89 for the clinical scales only.

Two reliability studies, one in the Detroit area and the other in Pennsylvania, were conducted to obtain estimates of scale reliability in normal populations. The Michigan study involved 46 mothers who, on two separate occasions, completed the P.I.C. on their children. The sample consisted of 25 males and 21 females between the

ages of 4.4 and 16.11 (X = 9.4). The testing interval was between 13 and 102 days (X = 50.9). The average test-retest reliability coefficient for the profile scales was .71.

The Pennsylvania study consisted of a sample of 55 children, 34 males and 21 females. The age range was between 5 and 11 (X = 7.9). There was a two week interval between test administrations. The average reliability coefficient for the profile scales was .89.

These studies suggest that the P.I.C. profile scales demonstrate sufficient stability across time to allow for the inventory's use in individual assessment. The lower reliability coefficient obtained in the Michigan study of nonpatients may be attributed to the extended test-retest interval, just as the higher correlations found in the Pennsylvania study may reflect the shorter time interval. Another factor which may have contributed to higher correlations between tests in the Pennsylvania study was the procedure of data collection, which did not ensure that the informants would not refer to the inventory (which they had first completed) while responding to the inventory for a second time.

Coefficient alpha estimates of internal consistency were computed based on a heterogeneous clinic sample (N = 1,226). Internal consistency estimates showed a mean alpha of .74. The only scale for which internal consistency reliability was extremely low was 'Defensiveness'. This may

reflect, in part, the situationally dependent nature of this scale.

Validity Studies

Lachar, Butkus, and Hrychorczuk (1978)(cited in Lachar, 1984) investigated the diagnostic potential of the P.I.C. in a childrens' psychiatric setting by determining external correlates of the profile scales. Mothers of 79 children (55 males, 24 females) who had received outpatient evaluation at the Lafayette Clinic in Detroit completed P.I.C.s. The average age of the children was 9 years, 8 months.

The sample consisted of children with varied symptomatology including primary diagnoses of hyperkinetic reaction unsocialized; aggressive reaction; specific learning disturbance; depressive neurosis; adjustment reaction; over-anxious reaction; mental retardation/organic brain syndrome; withdrawing reaction; seizure disorder; and those with no psychiatric illness. No psychotic children were included. A correlation of checklist items from psychiatrists with P.I.C. clinical scales resulted in an average of 12 correlates for each of the 16 scales. The following P.I.C. correlates were found to be the most noteworthy: "At least one year of achievement delay" with 'Achievement'; "below average intellectual functioning" with 'Intellectual Screening'; "at least one year of achievement delay and below average intellectual

functioning" with 'Development'; "places blame on others" with 'Somatic Concern'; "few or no friends, complaints of peer hostility and discrimination, and fights with siblings" with 'Depression'; "father as strict disciplinarian, uses excessive physical punishment, is alcoholic or substance abuser, and is emotionally disturbed" with 'Family Relations'; "places blame on others and disobeys parents" with 'Delinquency'; "unrealistic fears and has few friends" with 'Withdrawal'; "manifests anxious, tense, nervous, and restless behaviors" with 'Anxiety'; "seldom communicates" with 'Psychosis'; "prior stimulant therapy, overly active or agitated" with 'Hyperactivity'; and "suicidal thought and/or self-destructive behaviors and has few friends" with 'Social Skills'. According to the authors: "These results suggest the P.I.C. to be a valid instrument which, due to its efficiency, should enjoy expanded application" (Lachar, Butkus and Hrychorczuk, 1978)(cited in Lachar, 1984).

Lachar and Gdowski (1979)(cited in Lachar, 1984) indeed expanded on the study discussed above by studying a larger sample of 430 children ranging in age from 2 to 17 years. The adjective checklist was expanded to include 100 items to be rated after integrating the results of parent and teacher questionnaires, interviews with parents and children, and medical chart data. The results of the ratings were independent of the P.I.C. administration and were made by psychiatric resident physicians. A factor

analysis of checklist items resulted in the identification of 16 interpretable factors which accounted for 78.5 % of the common variance. These factors were correlated with the 12 clinical scales of the P.I.C.. The results are reported to establish evidence of convergent and discriminant validity of the P.I.C. scales. Discriminant validity was shown as the author found that higher scores on scales reflecting externalizing, aggressive bahviors (i.e., 'DLQ', 'HPR') were clearly not related to factors on the problem checklist which represernted symptomatology of internalizing behavior ("anxiety") depression, suicidal intent, and fearfulness. Convergent validity was demonstrated by the high correlations of the internalizing scales (i.e., 'D', 'ANX') with factors representative of internalizing symptomatology (sleep disturbance and social withdrawal).

Gdowski (1977) studied the ability of the P.I.C. scales to discriminate among relatively homogeneous groups of disturbed children. The 307 subjects (190 males, 117 females) ranged in age from 2.6 to 17.11 years (X = 12.5) and had been referred to the Lafayette Clinic. Psychiatric residents were asked to evaluate each subject on a 65 item problem behavior checklist. P.I.C.s were completed for all subjects. The subjects were then grouped into eight homogeneous subgroups based on patterns of disturbed behavior following factor analysis of the checklist. To determine whether the P.I.C. was sensitive to the symptom

patterns, an analysis of variance was executed to compare the cluster groups with P.I.C. profile scale scores. Post hoc comparisons allowed for the examination of cluster mean differences on the individual P.I.C. scales. With the exception of the 'SOM' scale, all clinical scales of the P.I.C. differed significantly across the cluster groups. The validity scales ('L', 'F', and 'DEF') and the screening scales ('ADJ') did not vary significantly across groups. The results indicate that the P.I.C. scales were sensitive to varied patterns of symptoms in a clinical population and were able to differentiate relatively homogeneous groups of behaviorally disturbed children and adolescents.

Anderson and Quast (1983)(cited in Lachar, 1984) administered the P.I.C. to 50 children ages 6 through 12 years of alcoholic families actively involved in treatment for alcoholism. Scores significantly deviant from P.I.C. norms were found on the 'Adjustment', 'Family Relations' and 'Anxiety' scales.

Leon, Kendall, and Garber (1980)(cited in Lachar, 1984) utilized the P.I.C. Depression Scale to differentiate between groups of depressed asnd non-depressed children. They found the P.I.C. to be sensitive to and consistent with external observations of depression in childhood.

To summarize, the Personality Inventory for Children is likely as sophisticated and psychometrically sound an instrument as is presently available (Graham and Lilly, (1984). The published reliability and validity studies for

the P.I.C. confirm its application in the assessment of children in clinical, school and other settings.

Proposed Scope and Implications of the Present Study

It is proposed that the present investigation be used to gain information about the quantifiable characteristics of children of alcoholics. This type of knowledge may prove useful in further clinical assessment and treatment of this group besides adding to the general data in existence pertaining to C.O.A.'s. At present, as has been shown, many C.O.A. research studies contain methodological flaws and/or reliance upon qualitative data. The anticipated strength of the present study, in view of the above literature review, is its unique contribution through the employ of proven objective means (i.e., the P.I.C.). An additional feature of this study is its focus upon C.O.A. behaviors as elicited through the perceptions of their alcoholic parents. As the literature reveals, this focus is one which has been largely overlooked thus far.

CHAPTER III

METHODS

This chapter documents the procedures used to conduct this study. A brief description of the data collection instrument -the Personality Inventory for Children (P.I.C.)- will be presented followed by a listing of the questions to be answered. The method of data analysis concludes this section.

Procedures

Seventy "parents" of children -aged six through sixteen- were invited to participate in this study on a voluntary basis. Potential subjects, both male and female, were identified on the basis of their active involvement in alcoholism counselling at an Alberta Alcohol and Drug Abuse Commission (AADAC) treatment unit in Edmonton.

A total of four treatment facilities -"Henwood", "Downtown Treatment Centre", "Day Counselling Unit", and "West End Centre"- were accessed and an approximately equal proportion (i.e., fifteen persons per treatment unit) of the final sample was drawn from each location.

All sixty-two respondents, the final sample size following screening and attrition, were between 20 and 49 years of age (average male age: 39.6 years; average female

age: 34.5 years). The majority were married (males: 74%; females: 62%), unemployed (males: 54%; females: 52%), had completed grade 10 (average grade level, male: 10.2; average grade level, female: 10.1) and spent an average of 14 sessions in treatment.

Instrumentation

The revised format Personality Inventory for Children (P.I.C.) administration booklet (1977, 1981)(see Appendix A) parts I, II, III, and IV was administered to subjects taking part in this study. Administration of the inventory requires that a respondent, typically the mother or father, provide answers on a child's behalf. The informant's perceptions of the child under study (i.e., the "subject") are intended to assist in the assessment and treatment of that child, as well as the early identification of developing patterns of problem behavior.

The P.I.C. was designed to provide a useful diagnostic instrument that would also be a practical measure of psychological characteristics among children. It is a 600 item inventory distinctive in that its interpretation and clinical use are based on empirically replicated correlates. Scale development was based on the use of appropriate criterion groups and normal contrast subjects. Items were presented to criterion and normal groups; those items which differentiated between the two were then included (Lachar, 1984).

The P.I.C. is composed of twelve (12) clinical scales, namely: 'Achievement' (ACH), 'Intellectual Screening' (IS), 'Development' (DVL), 'Somatic Concerns' (SOM), 'Depression' (D), 'Family Relations' (FAM), 'Delinquency' (DLQ), 'Withdrawal' (WDL), 'Anxiety' (ANX), 'Psychosis' (PSY), 'Hyperactivity' (HPR), and 'Social Skills' (SSK).

Four validity and screening scales [Lie (L), Frequency (F), Defensiveness (DEF), and Adjustment (ADJ)] assess the respondent's tendency to underreport or exaggerate childrens' behavioral symptoms, or to respond randomly. The four factor scales -not utilized for the purposes of this study- determine broad dimensions of child psychopathology including externalizing behavior (Factor I), internalizing behavior (Factor II), social incompetence (Factor III), and cognitive dysfunction (Factor IV).

Wirt and Broen (1958), the two original P.I.C. authors, chose to develop an instrument which used parents as respondents since a child's level of self-awareness, motivation and/or cognitive abilities for reading and conceptual understanding (of questionnaire items) may preclude a valid self-report assessment. Later research (Novik, Rosenfeld, Block and Dawson, 1966) supported the use of a parent report by demonstrating the validity of the responses and the lack of confounding bias.

Part of the initial development of the P.I.C. was the derivation of a norming group. An early version 600 item inventory with eleven content areas was normed during a

four year period from 1958 to 1962. The norm group was comprised of 2,390 children selected from schools of non-psychiatric institutions in the Minneapolis-St. Paul area of Minnesota. Each one year age level from 5 1/2 to 16 1/2 years included 100 males and 100 females.

In the development of the P.I.C., a decision was made to construct norms separately for each sex, and to evaluate the possibility of separating norms into continuous age groups in order to increase subgroup homogeneity and decrease the possibility that scale elevation would reflect age variance rather than actual psychological status. Neither inspection of the 11 age group means for each scale nor a series of discriminant function analyses suggested a parsimonious separation of the normative samples into subgroups based on chronological age (Lachar, 1984).

An independently obtained norm group was not established for this study because of the ready availability and appropriateness of the test author's norm group (Wirt, Lachar, Klinedinst, and Seat, 1984) and the ease with which immediate comparisons to the research sample could be made. A potential limitation of this approach is that the above cited norms have yet to be validated with local conditions such as economic and cultural statuses. Nonetheless, it is believed that the characteristics of the authors' norming group (e.g., age, socioeconomic status) make this norm population comparable to a hypothetical Alberta norming group which might have

been established. It is further suggested that the results of this study would not likely have altered appreciably due to the use of an original norm group of local children. In a local study, Forster (1986) utilized the P.I.C. with 81 sixth grade children (i.e., 12 and 13 years of age) in a study of reading difficulties. It was discovered that for the "normal" subjects in this study the norms provided by the test authors were in the same range.

The test authors have documented the reliability of the P.I.C. within clinical and normal populations (Wirt, Lachar, Klinedinst, and Seat, 1977, 1984). Test-retest reliability estimates on a clinical population (N = 34) -with intervals ranging from 4 to 72 days- yielded an average reliability coefficient of .86. Two reliability studies conducted by the test authors -Michigan normal sample (N = 46) and Pennsylvania normal sample (N = 55)- to obtain estimates of scale reliability in normal populations yielded an average test-retest reliability coefficient for the profile scales of .71 and .89 respectively (Wirt, Lachar, Klinedinst, and Seat, 1984). Finally, coefficient alpha estimates of internal consistency were computed based on a heterogeneous clinic sample (N = 1,226). Internal consistency estimates showed a mean alpha of .74.

Initial client contact at the various AADAC treatment units was made through the delivery of a standardized request for participation (see Appendix C). Those individuals who indicated their willingness to take part in

this study were further screened according to the following selection criteria as described in guidelines provided to AADAC counsellors:

1. Individuals engaged in formalized treatment for alcohol-related problems.

2. Preferably living with spouse or common-law partner, rather than single parent.

3. No objection to researcher contacting spouse/partner regarding research participation.

4. "Parent" or "guardian" of either:
   a.) a single child between ages 6 to 15 years;

   or

   b.) more than one child between ages 6 to 15 years.
   Choose the eldest child within that age range.

5. Respondents to the questionnaire must have known the child about whom they are completing the questionnaire for a period of at least twelve consecutive months.

6. Minimum grade six education.

7. Residence in the greater Edmonton area.

NOTE: - Children younger than 6 years of age and older than 15 years were not eligible as 'subjects' for this study.

- Children themselves did not participate; questions about them were answered by the parent/guardian.

They were subsequently contacted by telephone, typically within one week of the initial contact, and arrangements were made for a meeting to:

i) deliver the inventory and accompanying questionnaire,

ii) explain proper completion procedure(s),

iii) stress the researcher's adherence to strict confidentiality procedures,

iv) answer questions and allay any related concerns.

At the end of this meeting, further arrangements were made for the return of the completed P.I.C., usually one week hence. Participants who did not return materials within two weeks of the required return date received a follow-up telephone call soliciting return of same.

Once research participation was secured, a high rate of questionnaire return was assured owing to the researcher's personal delivery and retrieval of the majority of participant responses. Therefore, extensive oversampling to attain the final sample of sixty-two appropriate responses was unnecessary. Of the initial seventy volunteers approached sixty-five provided some form of response; spoilage (i.e., respondent error) resulted in a reducation to the final sample size of sixty-two persons.

Administration, in this instance, consisted of paper-and-pencil format and was primarily self-directed, thereby requiring minimal participation from and direction by the researcher.

Research Questions

Based on the literature reviewed, and in order to address the questions posed in this study the following research questions were generated.

Question #1

Are there significant mean differences between C.O.A.'s and the norm population on P.I.C. clinical scales?

Question #2

What is the relationship among the different clinical scales on the profiles of C.O.A.'s ?

Question #3

What percentage of C.O.A.'s had P.I.C. scores beyond the clinical cutoff points of (T-score) 80, (T-score) 70, and (T-score) 60? To what degree are these different from what could be projected for a normal data population?

Question #4

What percentage of the C.O.A.'s have one or more P.I.C. scales with scores within the clinical range?

Question #5

Which of the "elevated" (e.g., T-score of > 70) P.I.C. scales tended to be the most represented in the C.O.A.'s?

Treatment of the Data

Frequencies, means, and standard deviations were all calculated from raw scores and correlations between scales were derived from standard T-scores utilizing the same data. Consequently, descriptive statistics for both genders and all scales were generated as a result of computer analysis.

Descriptive analysis of the number of subjects and percentage of the total group scoring within certain T-score ranges was carried out on all 16 P.I.C. scales. The T-scores of subjects on the 'Family Relations', 'Withdrawal', 'Depression' and 'Delinquency' scales were compared with mean T-scores for the norm group. This, in part, permitted an assessment of the profile differences between the research sample and the norm group of "normal" children (see questions in Chapter I).

All returned questionnaires were hand-scored on the sixteen (16) P.I.C. scales: the combined total of the clinical and validity/screening scales. Raw scores were converted to T-scores (a product of the scoring procedures), which concurrently accounted for each child's age and gender. The resultant sample consisted of 27 females -with a mean age of 10.85 and 35 males -with a mean age of 10.83. The age range for both groups, boys and girls, was 6 to 16 years of age. Given that a t-test for independent means of their standardized scores determined

no significant differences between the gender groups they were not dealt with separately.

In addition, another t-test for independent means (p=.05) was executed on each on the clinical scales to determine the significance of any differences between sample means and norm means.

Finally, as mentioned above, a MANOVA was used to ensure comparability of research subjects across various AADAC treatment units. To enable the equating of sample 'sub-groups', both MANOVA and ANOVA were executed on the twelve clinical scales of the questionnaire. Results indicated that the claim that no significant differences exist between subjects drawn from the various AADAC treatment facilities (F=1.39, p=.08).

Taken in sum, these analyses lead to the interpretation of results described in Chapter IV.

CHAPTER IV

RESULTS AND FINDINGS

In this chapter results of the data analysis described in Chapter III will be presented as they relate to the research questions posed in this study.

Research Questions: Results

Question #1

To determine whether there was a significant difference in the means of C.O.A.'s and a norm population on P.I.C. clinical scales, a T-test for independent means was run on each of these scales. This test was performed on T-scores which incorporate a procedure that statistically accounts for the age and gender of each child.

For all but one clinical scale [i.e., 'Achievement' (ACH), 'Development' (DVL), 'Somatic Concerns' (SOM), 'Depression' (D), 'Family Relations' (FAM), 'Delinquency' (DLQ), 'Withdrawal' (WDL), 'Anxiety' (ANX), 'Psychosis' (PSY), 'Hyperactivity' (HPR), 'Social Skills' (SSK)] differences in sample means and norm group means were significant at the .05 level. The single exception to this pattern was the 'Intellectual Screening' (IS) scale wherein no significant difference was found (i.e., t = 0.1281)(see Table 1).

TABLE 1

t-Test Results:

P.I.C. SCALE MEANS AND STANDARD DEVIATIONS

Scale	Mean	SD	DF	t
ACH	53.13	7.8	61	3.19*
IS	51.53	11.7	61	0.13
DVL	53.36	7.7	61	3.44*
SOM	52.63	10.1	61	2.05*
D	60.82	11.1	61	7.68**
FAM	66.18	10.0	61	12.73**
DLQ	60.10	14.0	61	5.67**
WDL	61.53	12.8	61	7.84**
ANX	59.44	9.3	61	7.96**
PSY	53.82	11.3	61	2.68*
HPR	53.66	8.9	61	3.23*
SSK	54.11	10.2	61	3.18*

* significant at .05 level

** significant at .01 level

Thus, the overwhelming majority of P.I.C. clinical scales (11 out of 12) of a C.O.A. sample do show statistically significant differences in relation to a norm comparison group. Question #1, which asks whether a significant difference exists in the P.I.C. clinical scales of C.O.A.'s as opposed to the 'normal' comparison group was answered affirmatively.

Question #2

In order to assess the "relationship" among the different scales on the C.O.A.s' profiles, Pearson's r was computed. This statistic indicates degree of relationship -expressed through correlation coefficients- between the various P.I.C. scales.

This procedure revealed that the strongest positive relationships between scores occurred on the following P.I.C. scales: 'Adjustment' (ADJ) and 'Depression' (D)(r=.71), 'Withdrawal' (WDL) and 'Depression' (D)(r=.75), 'Social Skills' (SSK) and 'Depression' (D)(r=.74), and 'Anxiety' (ANX) and 'Depression' (D)(r=.67) (see Table 2).

Noteworthy in this result is the prominence of the 'Depression' subscale in each of the correlation pairings above, perhaps indicating the presence of this trait or factor as a central feature of the personality variables of C.O.A.'s.

TABLE 2

Condensed Correlation Matrix

PEARSON CORRELATION COEFFICIENTS

	ADJ	PSY	DLQ	HPR	D
ADJ	1.0	.64	.53	.08	.71
PSY	.64	1.0	.51	.08	.67
DLQ	.53	.51	1.0	.23	.58
HPR	.08	.08	.23	1.0	.01
WDL	.58	.41	.55	.02	.75
SSK	.65	.41	.40	.22	.74
ANX	.53	.63	.46	.19	.67
FAM	.26	.32	.33	-.04	.53

Question #3

To assess what percentage of C.O.A.'s had P.I.C. scores beyond the clinical cutoff points of (T-score) 80, (T-score) 70 and (T-score) 60 it was necessary to manually tabulate the number of T-scores within given ranges (i.e., T-scores > 60, T-scores > 70, etc.) on a profile-by-profile basis and then compare this result with a normal distribution for randomly occurring T-scores. Utilizing this method, it became clearly evident that the normal distribution of clinical scores was exceeded on the majority of P.I.C. scales. In the case of the 'FAM' subscale, normal statistical expectations were surpassed tenfold.

This analysis yielded substantially higher than normal percentages of clinical scores on the children of alcoholics' P.I.C. profiles and, hence, lead to the following response to Question #3:

1. 20.97% of the C.O.A.'s -10 males and 3 females- had at least one P.I.C. scale score above T-score of 80.

2. 32.26% of the C.O.A.'s -13 males and 7 females- had at least one P.I.C. scale score above T-score of 70 (but not above 80).

3. 85.48% of the C.O.A.'s -30 males and 23 females- had at least one P.I.C. scale score above T-score of 60 (but not above 70).

(For a graphic comparison of these findings -on a scale-by-scale basis- with the normal distribution of scores see Table 3.)

Question #4

A manual tally was also utilized to determine the percentage of C.O.A.'s who had one or more P.I.C. scales with scores within the 'clinical range' (i.e., >70). The tabulation indicated that 23 males (65.71% of all males) and 10 females (37.03% of all females) for a total of 33 C.O.A.'s had at least one P.I.C. scale with scores within the clinical range. This represents 53.22% of the C.O.A. sample overall. Thus, 53.22% of the C.O.A.'s had one or more P.I.C. scales with scores within the clinical range.

Question #5

As a logical extension of the previous two questions, it was once again necessary to rely upon a visual frequency count to answer the question of which "elevated" P.I.C. scales (i.e., T-score > 70) tended to be the most represented in the C.O.A.'s. This was determined by reference to the descriptive statistics printout which indicates a sum scores on each P.I.C. scale (as per Question #3) and observation of the scale which evidenced

TABLE 3

Comparison of C.O.A. Scale Score Distribution
with
A 'Normal' Population Score Distribution

	ACH	IS	DVL	SOM	
PIC T-scores					normal
>50<60	50%	39%	52%	40%	(34%)
>60<70	13%	21%	16%	18%	(16%)
>70<80	2%	3%	2%	6%	(2.3%)
>80	2%	2%	0	2%	(.13%)

	D	FAM	DLQ	WDL	
PIC T-scores					normal
>50	82%	89%	71%	76%	(34%)
>60	44%	71%	42%	44%	(16%)
>70	13%	24%	13%	8%	(2.3%)
>80	2%	6%	8%	5%	(.13%)

PIC T-scores	ANX	PSY	HPR	SSK	normal
>50	77%	44%	63%	52%	(34%)
>60	42%	16%	16%	19%	(16%)
>70	6%	6%	2%	3%	(2.3%)
>80	2%	2%	0	2%	(.13%)

the highest total. The scales which tended to be most represented with "elevated" scores, in descending order, were: 'Family Relations' (FAM): 20 scores, 'Delinquency' (DLQ): 15 scores, 'Withdrawal' (WDL): 11 scores, and 'Depression' (D): 11 scores.

Discussion

The execution of the present study demonstrated -in a general sense- several quantifiable differences which exist between children of alcoholics and statistically "normal" children. In the process of arriving at this major conclusion several other interesting observations were noted. For example, one important exception to the pattern evidenced in Question #5 was the absence of the 'Anxiety (ANX)' scale from the listing of "elevated" scales. Conceivably, difficulty with anxiety-related problems either does not figure prominently in the children of this sample, despite claims to the contrary (Black, 1979; Woititz, 1983), or it has been subsumed under the traits of other scales.

One possible explanation for this phenomenon can be found in the close inter-relation of several of the P.I.C. scales (Lachar, 1984). In particular, the 'Depression' (D) scale correlated highly with the four scales mentioned in Question #2 suggesting that the core traits of one scale may be present in other, alternately titled scales. An illustration of this argument is seen in the severity of

scores found on the 'Family Relations' (FAM) scale which, by the test authors' description seemingly contains items with content which overlaps the 'Anxiety' (ANX) scale. It is not too surprising, on an intuitive level, that matters of family relations might correlate highly with anxiety, even given the result of this study wherein the 'Anxiety' (ANX) scale does not appear to reflect unusual "problems" with the chosen sample.

Inter-scale correlations notwithstanding, an important observation remains the prominence of the 'Depression (D)' scale scores in all four of the highest correlation pairings as well as being one of the four most "elevated" scales. Referring to the literature, it is well supported that depression is uppermost amongst the harmful consequences of parental alcoholism on children of alcoholics (Cork, 1969; Booz-Allen and Hamilton, 1975; Russell, Henderson, and Blume, 1985; Stark, 1987).

Another pattern, highlighted in Question #3, was the greater frequency of 'clinical scores' (i.e., T-scores above 70) on subscales 'SOM', 'D', 'FAM', 'DLQ', and 'WDL' (see Table 3). Although it was previously noted that these scores have exceeded normal expectations by as much as tenfold, the overall figures remain relatively low. That is, despite approximately 10% of this sample evidencing scores within the clinical range - likely an indicator of problematic behavior - it must be stressed that fully 90%

of the results from that same sample remained within the normal range (i.e., < T-score 60).

In addition to the group results described above, the researcher's analysis of the data also revealed the seriousness of effects for several individual subjects from the study. Not readily apparent from the group statistics are the instances of extreme scores indicative of severely disturbed children (see examples, Table 4).

A welcome surprise was the finding that intellectual functioning (i.e., 'IS' scale) for this research sample does not appear different from the "normal" sample, nor does it appear to be problematic overall. Granted, the 'Intellectual Screening' scale does not suffice as a full-fledged intelligence test, but an argument can be made in favor of the strength of beneficial environmental influences. In this case a logical source of intellectual fortitude would be the classroom.

Perhaps intellectual ability is a variable less influenced by the environmental disruption of parental alcoholism than are affective dimensions such as 'Depression', 'Delinquency', and 'Withdrawal'. Further study of this phenomenon is required to determine if a genetic transmission of "intellect" may be partly responsible, or if the distinction is attributable to fluctuations in many traits measured across various scales.

The above findings form the basis for useful conclusions regarding children of alcoholics, and further

Pages 51 and 52, Table 4: 'Sample Extreme Scores' displaying 'Personality Inventory for Children' Profiles (copyright c 1977, 1981 by Western Psychological Services, 12031 Wilshire Blvd., Los Angeles, CA.), have been omitted due to the unavailability of copyright permission from the test publisher.

research recommendations which shall be discussed in Chapter V.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Restatement of the Problem

This study was conducted as a comparison between the Personality Inventory for Children (P.I.C.) profiles of children with alcoholic parents and a norm group of their peers. The major purpose of the research was to determine if significant differences existed between the two groups and, if so, on which individual scales and to what magnitude. These and other considerations were examined from the perspective of an earlier expressed interest: parental perceptions of alcoholics regarding their children's behaviors.

Summary of Findings

Based on the results of this research study a number of conclusions can be reached:

1. A statistically significant difference does exist between the P.I.C. clinical scales of C.O.A.'s and a norm comparison group.

2. The groups differed most on the dimensions measured by the scales: 'FAM' (family relations), 'WDL' (withdrawal), 'D' (depression), and 'DLQ' (Delinquency). Still, measurable differences of varying degree were recorded across all of the P.I.C. clinical scales.

3. The percentage of "problematic" profiles -those displaying scores within the 'clinical' level- exceeded the normal (curve) rate of distribution by as much as tenfold but generally extreme scores occurred less frequently than anticipated.

4. High correlations were found to exist between the 'Depression' ('D') scale and scales measuring 'Withdrawal' ('WDL'), 'Social Skills' ('SSK'), and 'Anxiety' ('ANX').

5. Intellectual differences were discovered not to be of statistical significance.

Discussion

The present study both concurs with and departs from the research literature on children from alcoholic households. Clearly, in agreement with many previously documented studies, the most important finding of this research has been the establishment of statistically significant differences between children of alcoholics and

a comparison group of their 'normal' peers. The major departure of this study is the indirect finding that children of alcoholics may display far fewer personality disturbances than has been previously suggested (e.g., Woititz, 1983). This claim is evidenced in the concentration of extreme scale scores on only four of the existing fourteen P.I.C. scales.

This particular result prompts some serious reconsideration of the conclusions drawn by researchers such as Woititz who has portrayed the 'typical' C.O.A. as an individual with more global problems than evidenced in this study (Woititz, 1984). Moreover, the work of Woititz (1983, 1984), Black (1981a), and Cork (1969), to name a few, can be further criticized for reliance upon anecdotal accounts, unspecified sample sizes and generally imprecise research methodology. This author recommends vigorous skepticism in accepting the generalizations and inferences suggested by any of these researchers.

The distinction of this research study is inherent in the selected instrumentation. Information has been indirectly gathered about the study sample, from parental reports, rather than from children first-hand. Arguably, this offers a unique contribution to the existing research literature in this domain.

While some published studies (e.g., Black, 1981b) have attempted to unravel the complexity of dynamics within the alcoholic family system, there appears to be a lack of

research examining parental views, particularly regarding the harmful effect of alcoholism on one's own family. It is purported that the current scientific endeavor also represents a step in a direction which may enable parents and therapists to more fully comprehend the impact that family drinking can have on the physical and mental well-being of children.

Of special importance to children of alcoholics programs and program directors, the administration of the P.I.C., as utilized for the purposes of this study, could well serve as a screening procedure for entry level participants. Experience has shown here that severity of effect can be well delineated, possibly depicting C.O.A.'s more positively than previously thought possible. Appropriate placement of such persons in available treatment resources would likely be aided in such cases.

Caution must be exercised in interpreting and generalizing from the results of this study; particularly, drawing the conclusion that parental alcohol abuse is the sole or even predominant cause of symptomatologies described herein. That the administration of the P.I.C. need never directly involve the children about whom information is being gathered poses some restrictions. Moreover, the sample of research subjects for this study was comprised entirely of alcoholic adults who were in treatment at the time they completed the questionnaire, thereby representing a rather select sample from the much

larger population of all alcoholics. It is suggested that the respondents for this study may have provided a more sophisticated set of responses, on average, as a consequence of their treatment experiences. Regardless, the validity and screening checks of the P.I.C. indicate the respondents' scoring of the questionnaire was well within 'acceptable' limits as established by the test authors (Wirt, Lachar, Klinedinst, and Seat, 1977, 1984).

A sample of alcoholics not similarly committed to treatment may have uncovered questionnaire responses indicative of parents less aware of and concerned with their childrens' well being. A replication of the present study comparing cross-sex response patterns of parents could also yield significant results. Such factors, which likely contribute to a restricted generalizability of the present findings, simply point the direction for future related studies.

Suggestions for Further Research

Research plays an essential role in the development and evaluation of an integrated system of prevention and treatment services for dependent and adult children of alcoholics. Neither the identification of difficulties experienced by children of alcoholics nor the termination of problematic drinking in the household appear sufficient to eradicate the traumatic effects of alcohol abuse they experience.

Additional research is required in the area of treatment for this group, with special emphasis necessitated toward variables such as the success rates of various treatment approaches and relapse-prevention strategies. Replicating this study with a sample of alcoholic parents not involved in treatment could prove enlightening. Perhaps one of the most logical areas for future research efforts though is a closer examination of those C.O.A.'s who pass through the alcoholic family system relatively unscathed. To date it remains unclear what mechanisms or dynamics may be at play allowing such an outcome. A better understanding of this phenomenon remains to be found.

Undeniably many other questions have yet to be answered. For example, what are the relative contributions of parental drinking to the development of psychopathologies in children of alcoholics? How do factors such as child gender, parent gender, birth order, and parental behavior correlate with the onset and severity of problems in children of alcoholics?

Further study of these and similar questions will continue to add to the growing body of research focussed on children of alcoholics. For the present, this endeavor has contributed quantitative data from a parental perspective that will trustfully be of utility in understanding, preventing and treating affective disorders spawned through alcohol abuse.

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APPENDIX B

C. A. S. T.

Please check the answers below that best describe your feelings, behavior, and experiences related to a parent's alcohol use. Take your time and be as accurate as possible. Answer all 30 questions by checking either "Yes" or "No".

Sex: Male _____ Female _____ Age: _____

Yes	No		Questions
___	___	1.	Have you ever thought that one of your parents had a drinking problem?
___	___	2.	Have you ever lost sleep because of a parent's drinking?
___	___	3.	Did you ever encourage one of your parents to quit drinking?
___	___	4.	Did you ever feel alone, scared, nervous, angry or frustrated because a parent was not able to stop drinking?
___	___	5.	Did you ever argue or fight with a parent when he or she was drinking?
___	___	6.	Did you ever threaten to run away from home because of a parent's drinking?
___	___	7.	Has a parent ever yelled at or hit you or other family members when drinking?
___	___	8.	Have you ever heard your parents fight when one of them was drunk?
___	___	9.	Did you ever protect another family member from a parent who was drinking?
___	___	10.	Did you ever feel like hiding or emptying a parent's bottle of liquor?
___	___	11.	Do many of your thoughts revolve around a problem drinking parent or difficulties that arise because of his or her drinking?
___	___	12.	Did you ever wish your parent would stop drinking?
___	___	13.	Did you ever feel responsible for and guilty about a parent's drinking?
___	___	14.	Did you ever fear that your parents would get divorced due to alcohol misuse?
___	___	15.	Have you ever withdrawn from and avoided outside activities and friends because of embarrassment and shame over a parent's drinking problem?
___	___	16.	Did you ever feel caught in the middle of an argument or fight between a problem drinking parent and your other parent?
___	___	17.	Did you ever feel that you made a parent drink alcohol?
___	___	18.	Have you ever felt that a problem drinking parent did not really love you?
___	___	19.	Did you ever resent a parent's drinking?
___	___	20.	Have you ever worried about a parent's health because of his or her alcohol use?
___	___	21.	Have you ever been blamed for a parent's drinking?
___	___	22.	Did you ever think your father was an alcoholic?
___	___	23.	Did you ever wish your home could be more like the homes of your friends who did not have a parent with a drinking problem?
___	___	24.	Did a parent ever make promises to you that he or she did not keep because of drinking?
___	___	25.	Did you ever think your mother was an alcoholic?
___	___	26.	Did you ever wish you could talk to someone who could understand and help the alcohol related problems in your family?
___	___	27.	Did you ever fight with your brothers and sisters about a parent's drinking?
___	___	28.	Did you ever stay away from home to avoid the drinking parent or your other parent's reaction to the drinking?
___	___	29.	Have you ever felt sick, cried, or had a "knot" in your stomach after worrying about a parent's drinking?
___	___	30.	Did you ever take over any chores and duties at home that were usually done by a parent before he or she developed a drinking problem?

___ TOTAL NUMBER OF "Yes" ANSWERS [C1:___ C2:___ C3:___ C4:___ C5:___ C6:___]

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APPENDIX C

Dear Parent or Guardian:

Mr. Alan Kostyniuk, a candidate for the degree of Masters in Education, at the University of Alberta, has been given approval to conduct a research study at this A.A.D.A.C. facility. Broadly speaking, this study shall examine your views concerning children from households in which alcohol problems are apparent.

Mr. Kostyniuk is seeking your participation as a volunteer. You are requested to complete a questionnaire containing questions about your child. This is expected to take approximately one hour and would occur in the privacy of your home. Should you choose to be a part of this scientific undertaking, the researcher -Mr. Kostyniuk- will contact you by phone and provide you with more detailed information, answers to any questions you may have and a brief report on the overall results.

Any information you provide to Mr. Kostyniuk, either about yourself or about members of your family (or others), shall remain strictly confidential. Furthermore, you are under no obligation to comply and failure to do so shall in no way effect your involvement with this or any other AADAC treatment facility.

If you agree to participate in this study, however, please read and complete the 'Consent' section and sign your name where indicated. If you have any questions at this time or if you are in need of further clarification, please do not hesitate to call Mr. Kostyniuk at 482-7523 between 8 a.m. and 5 p.m.. Please leave your name and a telephone number where you may be reached if he is not available.

On behalf of Mr. Kostyniuk, thank you for your time and consideration.

Unit Manager _____

(* Continued on next page)

Research Participation Consent

I hereby agree to participate in the research study conducted by Mr. Alan Kostyniuk.

Only the information below shall be given to used Mr. Kostyniuk. He will use this information for the sole purpose of delivering questionnaires and it shall not be disclosed to anyone else. It is further understood that no other information about me, my family members or my involvement at A.A.D.A.C. shall be released.

Date _____

Name _____
(print)

Signature _____

Telephone _____
(where you can be reached)

APPENDIX D

RESEARCH SUBJECT APPROPRIATENESS

1. Individuals engaged in formalized treatment for alcohol-related problems.

2. Preferably living with spouse or common-law partner, rather than single parent.

3. No objection to researcher contacting spouse/partner regarding research participation.

4. "Parent" or "guardian" of either:

   a.) a single child between ages 6 to 15 years;

   or

   b.) more than one child between ages 6 to 15 years. Choose the eldest child within that age range.

5. Individuals completing the questionnaire must have known the child about whom they are completing the questionnaire for a period of at least twelve consecutive months.

6. Minimum grade six education.

7. Residence in the greater Edmonton area.

NOTE: - Children younger than 6 years of age and older than 15 years are not eligible as 'subjects' for this study.

- Children themselves do not participate. Questions about them are answered by the parent/guardian.

10/21/86